Patent Application of

Timothy B. Carroll

for

# MULTI-FUNCTION FINGER GUIDE

## CROSS-REFERENCES TO RELATED APPLICATIONS

Not Applicable.

## STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

Not Applicable.

## MICROFICHE APPENDIX

Not Applicable

## BACKGROUND OF THE INVENTION

1. Field of the Invention.

This invention relates to the field of hand tools. More specifically, the invention comprises a finger guide which assists a user in measuring, cutting, marking, and scoring objects such as lumber, plywood, and sheetrock.

2. Description of the Related Art.

Numerous marking and cutting guides are used in the construction industry. Tape measures are employed to measure distances. Framing squares provide perpendicular markings for transverse cuts. Large saw guides are used for cutting straight lines over large distances (such as "rip" cuts along the length of a board). These devices tend to be fairly large, making them difficult to carry around the work site.

Additionally, many of the prior art devices require the user to run his or her fingers along the edge of the object to be cut. This operation is not difficult, but when it is repeated many times throughout a work day it produces skin abrasions. Splinters and reinforcing fibers may also be lodged in the user's hand.

## BRIEF SUMMARY OF THE INVENTION

The present invention comprises a finger guide for use in measuring, marking, scribing, cutting and similar operations common to the field of construction. The device assists in performing these operations on an object such as a board or piece of drywall. The finger guide has a top guide which is laid on the top surface of an object, and a perpendicular edge guide which abuts an edge of the object. The edge guide includes an index finger hole which allows the user to slip the device on

his or her index finger and "wear" it like a ring. The top guide opens into a tape trough positioned to receive and hold a length of metal tape from a conventional tape measure. The top guide also includes reference marks used for measuring. Other features allow the device to be used as a saw guide in conjunction with a conventional circular saw.

## BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

FIG. 1 is a perspective view, showing the present invention.

FIG. 2 is a perspective view, showing the present invention from another angle.

FIG. 3 is a perspective view, showing the invention in use.

FIG. 4 is a perspective view, showing the invention being used with a tape measure.

FIG. 5 is a perspective view, showing the invention being used with a tape measure.

FIG. 5B is a perspective detail view, showing the invention being used to accurately measure a distance.

FIG. 6 is a perspective view, showing the invention being used to scribe a cut.

FIG. 7 is a perspective view, showing the invention being used as a saw guide.

FIG. 8 is a perspective view, showing the use of the invention as a saw guide.

FIG. 9 is a perspective view, showing an alternate version of the edge mating surface

## REFERENCE NUMBERS IN THE DRAWINGS

| | | | |
|---|---|---|---|
| 10 | finger guide | 12 | top guide |
| 14 | edge guide | 16 | tape trough |
| 18 | reference mark | 20 | index finger hole |

| | | | |
|---|---|---|---|
| 21 | middle finger trough | 22 | top mating surface |
| 24 | edge mating surface | 26 | relief bevel |
| 28 | fillet | 30 | board |
| 32 | board top | 34 | board edge |
| 36 | tape measure | 38 | tape |
| 40 | stop | 42 | index finger |
| 44 | middle finger | 46 | thumb |
| 48 | scale mark | 50 | knife |
| 52 | circular saw | 54 | saw foot |
| 56 | relief bevel | | |

## DETAILED DESCRIPTION OF THE INVENTION

FIG. 1 shows finger guide **10**. It is composed of two primary components - top guide **12** and edge guide **14**. FIG. 2 shows the same device from a different vantage point. The lower surface of top guide **12** is designated as top mating surface **22**. The adjacent edge of edge guide **14** is designated as edge mating surface **24**. Top mating surface **22** and edge mating surface **24** are generally perpendicular.

In FIG. 1, the reader will observe that the upper surface of top guide **12** opens into tape trough **16**. Two reference marks **18** are scribed into this upper surface as well. These marks are precisely aligned with edge mating surface **24**.

Edge guide **14** opens into index finger hole **20**, which passes transversely therethrough. Edge guide **14** also contains a second surface distal to edge mating surface **24**. This second surface

includes middle finger trough **21**, the purpose of which will be explained subsequently. Edge guide **14** also contains relief bevel **26** and fillet **28**. These features allow finger guide **10** to pass by obstructions in use.

FIG. 3 illustrates the typical manner of using the invention. Finger guide **10** has been applied to board **30** by placing top guide **12** on board top **32** and edge guide **14** on board edge **34**. Top mating surface **22** rests firmly against board top **32**; edge mating surface **24** rests firmly against board edge **34**. The user can then slide finger guide **10** back and forth along board edge **34** (as indicated by the reciprocating arrow), while maintaining its orientation.

A first use of finger guide **10** is the measurement of board widths. FIG. 4 shows finger guide **10** in position along board edge **34**. A tape measure **36** is applied by dropping stop **40** over board **30**'s far edge and stretching tape **38** across the board as shown. Tape **38** will rest in tape trough **16**.

FIG. 5 shows this assembly as it is actually held by the user. The user's index finger **42** passes through index finger hole **20**. A portion of the user's middle finger **44** rests within middle finger trough **21**. Tape measure **36** rests in the palm of the user's hand.

Finger guide **10** is thus worn like a ring, with the interface between the middle finger and middle finger trough **21** providing a stable orientation for finger guide **10** without the user having to tightly grip it. The user's thumb **46** is used to press tape **38** firmly down into tape trough **16**. FIG. 5B is a closer top view of tape **38** lying within trough **16**. The reader will recall that reference marks **18** are precisely aligned with edge mating surface **24**, and therefore with board edge **34** itself. The user then reads the appropriate scale mark **48** on tape **38** in order to precisely determine the maximum width of the board. Those skilled in the art will know that measuring this width without the use of

the finger guide can be inaccurate, since such a measurement typically is made at the top edge, which may or may not correspond to the maximum width.

FIG. 6 shows another use of finger guide **10**. The user can slide the device along the edge of a board or panel - in this case sheet rock **46**. Ordinarily, this action would subject the user to splinters and abrasion. Because the user's index finger is protected completely by edge guide **14**, however, these concerns are eliminated. In this particular example, the user wants to scribe a cut using knife **50**. He or she pulls tape **38** out of tape measure **36** until the desired scale mark **48** is aligned with reference marks **18**. If, as an example, the user wants to scribe a cut 5 inches off the reference edge, the 5 inch mark on the tape is aligned with reference marks **18**. Knife **50** is then held against stop **40** and the assembly is moved in unison while the knife scribes a cut. The same technique can be used to mark a line. The user simply substitutes a marking pencil or pen for knife **50**.

FIG. 7 shows still another use of finger guide **10**. Those skilled in the art will know that a carpenter's fingers are sometimes used to guide a circular saw in a long "rip" cut. Circular saw **52** has a square saw foot **54** as its base. In the prior art, a right-handed carpenter will grab saw foot **54** and allow his or her index finger to drop below the plane of the foot to act as an edge guide. The user then pushes the saw along, with the index finger maintaining the proper distance from the board's edge to the blade. Of course, this method is somewhat inexact. It also guarantees the addition of several splinters to the carpenter's hand over the course of a day.

In FIG. 7, finger guide **10** has been placed just in front of saw foot **52**, with edge mating surface **24** being pressed against the reference edge of board **30**. The user then grabs finger guide **10** in the manner described previously and uses his or her fingers to clamp finger guide **10** against saw

foot **54** so that finger guide **10** and circular saw **52** move in unison. FIG. 8 provides a visual explanation: The user slips index finger **42** through index finger hole **20** and places middle finger **44** against middle finger trough **21**. The tips of the user's fingers extend well beyond finger guide **10**. This fact allows the user to clamp saw foot **54** between the finger tips and thumb **46**, thereby holding finger guide **10** securely against saw foot **54**. The user then slides the two along, with the finger guide maintaining the proper position for the saw so that a straight cut results.

Returning now to FIG. 2, the reader will observe that edge mating surface **24** is planar. This need not be the case. In fact, a large and planar surface sometimes tends to snag as the finger guide is moved along. FIG. 9 shows a variant intended to remedy this concern. In FIG. 9, the size of edge mating surface **24** has been significantly reduced by the addition of two relief bevels **56**. These features allow more of a "point" loading along the reference guide, which tends to reduce snagging. In the view as shown, edge mating surface **24** is a relatively small and flat plane. It can also be curved. For that case, the two reference marks **18** are aligned with the point of tangency for the curved edge mating surface.

The preceding descriptions contain significant detail regarding the novel aspects of the present invention. They should not be construed, however, as limiting the scope of the invention but rather as providing illustrations of the preferred embodiments of the invention. Thus, the scope of the invention should be fixed by the following claims, rather than by the examples given.